

ABSTRACT OF THE DISCLOSURE

In a fuel reforming apparatus having a reformer for reforming a raw fuel containing a hydrocarbon-containing compound so as to produce a hydrogen-rich fuel gas for use in a fuel cell, a carbon removal process for removing carbon deposited on a reforming catalyst contained in the reformer is executed by controlling the amount of the raw fuel supplied to the reformer and the amount of the oxygen supplied to the reformer so that a ratio of the number of oxygen atoms O supplied to the reformer to the number of carbon atoms supplied to the reformer becomes larger than an appropriate range of the O/C ratio that is to be established during a normal operation of the reformer.